

**ADAPTIVE EQUALIZER**

**ABSTRACT**

An adaptive equalizer processes an input signal that  
5 includes noise, pre-cursor intersymbol interference, and post-  
cursor intersymbol interference. The adaptive equalizer  
includes a feedforward filter which reduces the pre-cursor  
intersymbol interference and whitens the noise, a feedback  
filter which detects the post-cursor intersymbol interference  
10 in a signal that corresponds to the input signal, and  
circuitry which removes the detected post-cursor intersymbol  
interference from the input signal. The feedforward filter  
includes separate first and second coefficients. The first  
coefficients reduce the pre-cursor intersymbol interference  
15 and the second coefficients whiten the noise.

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